

## **5 Ampere Digital Power Supply use LCD Screen Base of Atmega16**

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### **ABSTRACT**

5 Ampere Digital Power Supply use LCD Screen Base of Atmega16 is a tool it has function to give voltage for DC, voltage needed and it has purpose to realize master plan hardware and use software with simply working by push input keypad and will output in LCD.

Master plan 5 Ampere Digital Power Supply use LCD Screen Base of Atmega16 consist of hardware and software, hardware arranged first by simulation, that is use software ISIS proteus7.9 integrated by software Code Vision AVR and used to analyze before make this tool. ISIS proteus also used as layout master plan on PBC, consist of (1) Minimum Atmega16 system. (2) Driver motor used chip L 239 D as DC motor controlling it move potentiometer. (3) Output connection used chip LM 317 as output adjustment, software to C language program and use write software Code Vision AVR consist of (1) Main program (2) Hardware initialization program (3) processor definition used chip Atmega16 (4) Function description (5) Port mode ADC definition (6) Variable declaration (7) Main function program.

Based on trial, it can do by working result from 5 Ampere Digital Power Supply use LCD Screen Base on Atmega16 master plan by proteus7.9 simulation and software CVAVR output produce 20 volt DC, and also output by input keypad voltage variable (volt) and will appear in visual LCD voltage (volt).

Keyword: Power Supply.